

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave.St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-024555**Date Inspected:** 10-May-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yan Hua**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Vikram Singh was present during the times noted above for observations relative to the work being performed at ZPMC.

NDT

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No 09093.

**Ultrasonic Testing (UT)**

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG 14E. The weld designations reviewed is as follows:

SEG3019S-113, 108, 103, 093, 088, 083, 078, 073, 068, 063, 058, 053, 048, 043, 038, 028, 023, 018,013, 008, 003

SEG3019Q-2-245, 243, 241, 239, 237, 235, 233, 231, 229, 227, 225, 223, 221, 219, 217, 215, 181, 180, 186, 185, 191, 190, 196, 195, 201, 200, 255, 254

SEG3019Q-1-105

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

The following weld did not appear to comply with the applicable contract documents:

SEG3019S-033 located on side plate stiffener to floor beam @ PP126; This QA observed one (1) Toe crack measuring approximately 110mm in length. This QA informed to ZPMC Quality Control (QC) indentified as Mr. Mr. Xie Ming Feng and American Bridge Fluor (ABF) QA identified as Mr. Zhang Ji Cai. For further information please see the attached pictures below

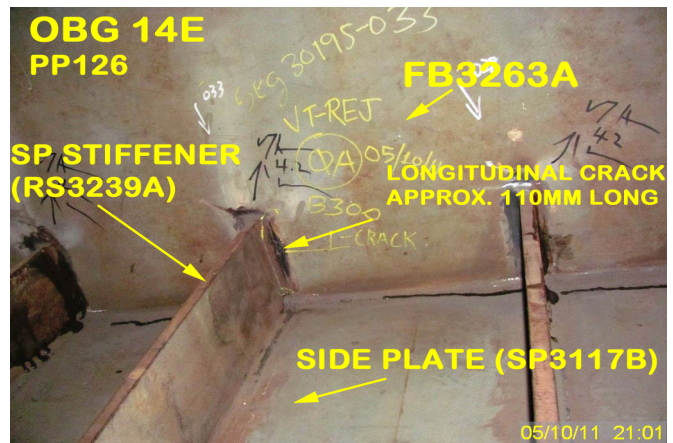
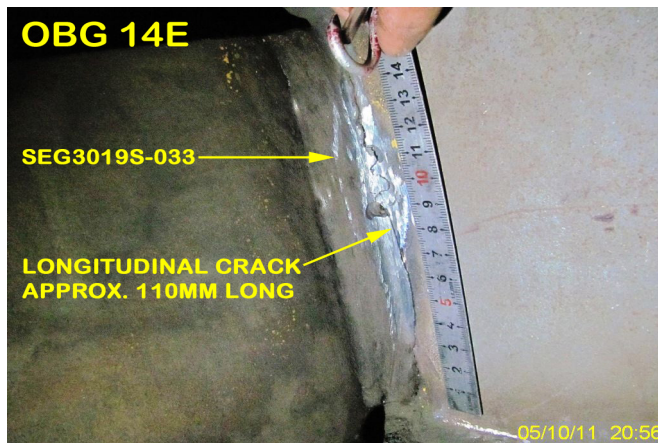
### WELDING

TA-Yard

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW)

This QA Inspector observed the welding operation per the SMAW process on a weld joint identified as SA3451-001-020 located on SA Stiffener of the OBG Segment 14W. The welder is identified as 067610. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-FCM-1.



### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact James Devey-15000026784, who represents the Office of Structural Materials for your project.

---

**Inspected By:** Singh, Vikram

Quality Assurance Inspector

---

---

## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

**Reviewed By:** Riley, Ken

QA Reviewer